

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

NA0019 Tehama County Flood Control and Water Conservation District	Overall LMA Rating	Total LMA Miles						
	M	13.64						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	1.40		1.40	10.26%	0.06			
Encroachments	0.08		0.08	0.59%	0.49			
Animal Control	0.07		0.07	0.51%				
Slope Stability	0.33		0.33	2.42%				
Erosion / Bank Caving	0.04		0.04	0.29%				
<i>Supplemental</i>								
USACE Erosion Survey	0.16		0.16	1.17%				
<i>LMA Totals:</i>	2.08	0.00	2.08	15.25%	0.55	0.00	0.00	0.00

Unit No. 01 Deer Creek LB NA0019	Overall Unit Rating	Total Unit Miles						
	U	4.11						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.73		0.73	17.76%				
Encroachments	0.01		0.01	0.24%	0.23			
Animal Control	0.01		0.01	0.24%				
Slope Stability	0.14		0.14	3.41%				
Erosion / Bank Caving	0.03		0.03	0.73%				
<i>Supplemental</i>								
USACE Erosion Survey	0.02		0.02	0.49%				
<i>Unit Totals:</i>	0.94	0.00	0.94	22.87%	0.23	0.00	0.00	0.00

Unit No. 02 Deer Creek RB NA0019	Overall Unit Rating	Total Unit Miles						
	A	1.50						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.03		0.03	2.00%	0.02			
<i>Supplemental</i>								
USACE Erosion Survey	0.05		0.05	3.33%				
<i>Unit Totals:</i>	0.08	0.00	0.08	5.33%	0.02	0.00	0.00	0.00

Flood Control Project Maintenance
Levee Inspections

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Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin (cont.)

Unit No. 04 Elder Creek LB NA0019	Overall Unit Rating	Total Unit Miles						
	A	4.07						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.05		0.05	1.23%				
Encroachments	0.04		0.04	0.98%	0.23			
Animal Control	0.02		0.02	0.49%				
Slope Stability	0.19		0.19	4.67%				
<i>Supplemental</i>								
USACE Erosion Survey	0.07		0.07	1.72%				
<i>Unit Totals:</i>	0.37	0.00	0.37	9.09%	0.23	0.00	0.00	0.00
Unit No. 05 Elder Creek RB NA0019	Overall Unit Rating	Total Unit Miles						
	M	3.96						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.62		0.62	15.66%	0.06			
Encroachments					0.01			
Animal Control	0.04		0.04	1.01%				
Erosion / Bank Caving	0.01		0.01	0.25%				
<i>Supplemental</i>								
USACE Erosion Survey	0.02		0.02	0.51%				
<i>Unit Totals:</i>	0.69	0.00	0.69	17.42%	0.07	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**

LMA District Cover Sheet

Fall 2013 Levee Inspection Results

Tehama County Flood Control and Water Conservation District

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			M	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*

SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an induction of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Tehama County Flood Control and Water Conservation District

Waterway			Bank	Unit Miles
Unit No. 01 Deer Creek			Left	4.11
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	04/10/2013 - 04/10/2013		10/22/2013 - 10/22/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Brandon Konicke Tehama County		Brandon Konicke Tehama County	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Flood Control Project Maintenance
Levee Inspections

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector	
L/MR No.	Levee Mile		Category	Item	* Location	* Rating	Action/Comment			GPS Latitude/Longitude	Issue No.
	Start	End								Start	End
1	Earthen Levee	Operations & Maintenance Manuals	WS	A Ma						°	° 12
										°	°
											DWR ID: DWR_NA0019_01_s_2013_12
2	Earthen Levee	Emergency Supplies & Equipment	WS	A Ma						°	° 13
										°	°
											DWR ID: DWR_NA0019_01_s_2013_13
3	Earthen Levee	Flood Preparedness & Training	WS	A Ma						°	° 14
										°	°
											DWR ID: DWR_NA0019_01_s_2013_14
4	0.02 0.02	Earthen Levee	Erosion / Bank Caving	LS M Ma	E1 : Note and monitor erosion site.					39.973111 ° 39.973111 ° 17 -121.980466 ° -121.980466 ° Y	
											DWR ID: DWR_NA0019_01_s_2013_17
5	0.41 0.41	Earthen Levee	Erosion / Bank Caving	LS M Ma	E1 : Note and monitor erosion site.					39.972560 ° 39.972560 ° 18 -121.987759 ° -121.987759 ° Y	
											DWR ID: DWR_NA0019_01_s_2013_18
6	0.48 0.48	Earthen Levee	Erosion / Bank Caving	LS M Ma	E1 : Note and monitor erosion site.					39.972339 ° 39.972339 ° 19 -121.988763 ° -121.988763 ° Y	
											DWR ID: DWR_NA0019_01_s_2013_19
7	1.53 1.53	Earthen Levee	Animal Control	LS M Ma	A2 : Repair the levee slope damaged by livestock and prevent large animal access.					39.969419 ° 39.969419 ° 21 -122.007850 ° -122.007850 ° Y	
											DWR ID: DWR_NA0019_01_f_2013_21
8	2.04 2.23	Earthen Levee	Encroachments	LS M En	DT : Ditch					39.968387 ° 39.966968 ° 2 -122.016387 ° -122.019372 ° Y	
											DWR ID: DWR_NA0019_01_s_2012_2
9	2.31 3.04	Earthen Levee	Vegetation	LS M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.					39.967015 ° ° 3 -122.020781 ° ° Y	
											DWR ID: DWR_NA0019_01_f_2012_3
10	2.50 2.58	Earthen Levee	Slope Stability	CR M Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					39.967016 ° 39.966455 ° 7 -122.024068 ° -122.025531 °	
											DWR ID: DWR_NA0019_01_s_2012_7
11	2.72 2.76	Earthen Levee	Slope Stability	CR M Ma	S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					39.965434 ° 39.965180 ° 8 -122.027776 ° -122.028331 ° Y	
											DWR ID: DWR_NA0019_01_s_2012_8
12	2.90 2.90	Earthen Levee	Slope Stability	LS M Ma	S1 : Repair slope instability.					39.963709 ° 39.963709 ° 20 -122.030384 ° -122.030384 ° Y	
											DWR ID: DWR_NA0019_01_s_2013_20

* Location
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A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Flood Control Project Maintenance
Levee Inspections

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway								Bank	Unit Miles	Inspection Start/End	Inspector
LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End		
13	2.98	3.00	Supplemental USACE Erosion Survey	WS M	Ma		Inspector Comments: 2006 - Erosion along outer bank of a meandering bend that is getting close to the projection of the levee toe. Trees are leaning out into the channel and ready to fall. Whole bank in reach is actively eroding. 2011 - New erosion pocket caused by an eddy. The Deer Creek Watershed Conservation Group is planning a reach-wide repair for Deer Creek. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: DEC_2-4_L]	39.962910 °	39.962724 °	1	
								-122.031421 °	-122.031670 °		
14	3.64	3.64	Earthen Levee	Encroachments	CR M	FE : Fence En		39.945249 °	39.945249 °	9	
								-122.053720 °	-122.053720 °	Y	
								DWR ID: DWR_NA0019_01_s_2012_9			
15	3.68	3.68	Earthen Levee	Slope Stability	WS M	S1 : Repair slope instability. Ma		39.945045 °	39.945045 °	15	
								-122.053469 °	-122.053469 °	Y	
								DWR ID: DWR_NA0019_01_f_2012_15			
16	3.74	3.74	Earthen Levee	Encroachments	WS M	PI : Pipe En	Inspector Comments: No flapgate on pipe.	39.944455 °	39.944455 °	11	
								-122.053949 °	-122.053949 °	Y	
								DWR ID: DWR_NA0019_01_s_2012_11			
17	3.74	3.74	Earthen Levee	Encroachments	CR M	FE : Fence En		39.944432 °	39.944432 °	10	
								-122.054029 °	-122.054029 °	Y	
								DWR ID: DWR_NA0019_01_s_2012_10			
18	3.74	3.74	Earthen Levee	Encroachments	LS M	DT : Ditch En		39.944456 °	39.944456 °	16	
								-122.053932 °	-122.053932 °	Y	
								DWR ID: DWR_NA0019_01_f_2012_16			
19	3.79	3.79	Earthen Levee	Encroachments	LS M	PR : Prunings Ma		39.944135 °	39.944135 °	5	
								-122.054788 °	-122.054788 °		
								DWR ID: DWR_NA0019_01_s_2012_5			

* Location
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Flood Control Project Maintenance
Levee Inspections

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Deer Creek	Left	4.11	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	4
Start Levee Mile	0.02
End Levee Mile	0.02
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the landside slope.

rduffey_f_20130919_014.JPG



Levee Mile Report Line	5
Start Levee Mile	0.41
End Levee Mile	0.41
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the landside slope.



Levee Mile Report Line	6
Start Levee Mile	0.48
End Levee Mile	0.48
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the landside slope.

rduffey_f_20130919_016.JPG



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Levee Inspection Report By Mile - Fall 2013

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Deer Creek	Left	4.11	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	7
Start Levee Mile	1.53
End Levee Mile	1.53
Location	Land Side
Category	Earthen Levee
Item	Animal Control
View of the erosion cause from livestock on both slope of the levee.	
rduffey_f_20131104_111.JPG	



Levee Mile Report Line	8
Start Levee Mile	2.04
End Levee Mile	2.23
Location	Land Side
Category	Earthen Levee
Item	Encroachments
Remove agricultural ditch from toe of levee.	
rduffey_f_20130919_006.jpg	



Levee Mile Report Line	9
Start Levee Mile	2.31
End Levee Mile	3.04
Location	Land Side
Category	Earthen Levee
Item	Vegetation
View of the vegetation along the landside slope.	
rduffey_f_20130919_007.JPG	



* Location LS : Land Side WS : Water Side CR : Crown
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+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Deer Creek	Left	4.11	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	11
Start Levee Mile	2.72
End Levee Mile	2.76
Location	Crown
Category	Earthen Levee
Item	Slope Stability
Erosion on crown and both slopes.	
rduffey_f_20130919_008.jpg	



Levee Mile Report Line	12
Start Levee Mile	2.90
End Levee Mile	2.90
Location	Land Side
Category	Earthen Levee
Item	Slope Stability
View of the erosion along the landside slope.	
rduffey_f_20130919_017.JPG	



Levee Mile Report Line	14
Start Levee Mile	3.64
End Levee Mile	3.64
Location	Crown
Category	Earthen Levee
Item	Encroachments
View of the non-permitted gate on the crown of the levee.	
rduffey_f_20130919_009.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Deer Creek	Left	4.11	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	15
Start Levee Mile	3.68
End Levee Mile	3.68
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

View of the erosion caused by livestock along the landside slope.

rduffey_f_20130919_012.JPG



Levee Mile Report Line	16
Start Levee Mile	3.74
End Levee Mile	3.74
Location	Water Side
Category	Earthen Levee
Item	Encroachments

No flap gate on 18 inch pipe going to the levee.

rduffey_f_20130919_011.jpg



Levee Mile Report Line	17
Start Levee Mile	3.74
End Levee Mile	3.74
Location	Crown
Category	Earthen Levee
Item	Encroachments

View of the non-permitted gate on the crown roadway.

rduffey_f_20130919_010.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Deer Creek	Left	4.11	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	18
Start Levee Mile	3.74
End Levee Mile	3.74
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of the ditch along the waterside toe.	
rduffey_f_20130919_013.JPG	



* Location LS : Land Side WS : Water Side CR : Crown

** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Tehama County Flood Control and Water Conservation District

Waterway			Bank	Unit Miles
Unit No. 02 Deer Creek			Right	1.50
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	04/10/2013 - 04/10/2013		10/22/2013 - 10/22/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Brandon Konicke Tehama County		Brandon Konicke Tehama County	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
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Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway								Bank	Unit Miles	Inspection Start/End	Inspector
LMR No.	Levee Mile		Category	Item	* Location	* Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End		
1	0.31	0.31	Earthen Levee	Encroachments	LS Ma	M	DE : Debris	39.970305 °	39.970305 °	2	
							Ma	-122.014465 °	-122.014465 °	Y	
								DWR ID: DWR_NA0019_02_s_2012_2			
2	0.34	0.34	Earthen Levee	Encroachments	WS Ma	M	DE : Debris	39.970210 °	39.970210 °	4	
							Ma	-122.015198 °	-122.015198 °	Y	
								DWR ID: DWR_NA0019_02_s_2012_4			
3	0.36	0.36	Earthen Levee	Encroachments	LS En	M	BU : Building	39.970117 °	39.970117 °	7	
							En	-122.015365 °	-122.015365 °	Y	
								DWR ID: DWR_NA0019_02_s_2012_7			
4	0.86	0.91	Supplemental Survey	USACE Erosion	WS Ma	M	Inspector Comments: 2006 - Banks are composed of lithified cobble alluvial soils (relict alluvial fan deposits). Slow erosion of lithified lower bank materials with faster erosion of overlying less cohesive soils resulting in channel "skating" across lithified horizon. 2011 - The Deer Creek Watershed Conservation Group is planning a reach-wide repair for Deer Creek. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: DEC_0-9_R]	39.968165 °	39.967766 °	1	
							Ma	-122.023828 °	-122.024620 °		
								DWR ID:			
5	1.30	1.30	Earthen Levee	Encroachments	WS Ma	M	FW : Firewood	39.964883 °	39.964883 °	6	
							Ma	-122.030655 °	-122.030655 °	Y	
								DWR ID: DWR_NA0019_02_s_2012_6			
6	1.39	1.39	Earthen Levee	Encroachments	WS En	M	DE : Debris	39.963997 °	39.963997 °	3	
							En	-122.032030 °	-122.032030 °	Y	
								DWR ID: DWR_NA0019_02_f_2013_3			

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Deer Creek	Right	1.50	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	1
Start Levee Mile	0.31
End Levee Mile	0.31
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of debris & wire at toe of levee.	
rduffey_f_20130919_018.jpg	



Levee Mile Report Line	2
Start Levee Mile	0.34
End Levee Mile	0.34
Location	Water Side
Category	Earthen Levee
Item	Encroachments
View of the concrete pile along the W/S toe.	
rduffey_f_20130919_019.jpg	



Levee Mile Report Line	3
Start Levee Mile	0.36
End Levee Mile	0.36
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of building at toe of levee.	
rduffey_f_20130919_021.jpg	



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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Deer Creek	Right	1.50	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	5
Start Levee Mile	1.30
End Levee Mile	1.30
Location	Water Side
Category	Earthen Levee
Item	Encroachments
Remove all firewood.	

rduffey_f_20130919_020.jpg



Levee Mile Report Line	6
Start Levee Mile	1.39
End Levee Mile	1.39
Location	Water Side
Category	Earthen Levee
Item	Encroachments
View of the debris along the waterside slope of the levee.	

rduffey_f_20131104_112.JPG



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Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Tehama County Flood Control and Water Conservation District

Waterway			Bank	Unit Miles
Unit No. 04 Elder Creek			Left	4.07
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	04/10/2013 - 04/10/2013		10/22/2013 - 10/22/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Brandon Konicke Tehama County		Brandon Konicke Tehama County	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway								Bank	Unit Miles	Inspection Start/End	Inspector
LMR No.	Levee Mile		Category	Item	* Location	* Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End		
1	1.41	1.41	Earthen Levee	Animal Control	LS Ma	M	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	40.051517 °	40.051517 °	8	
								-122.164850 °	-122.164850 °	Y	
								DWR ID: DWR_NA0019_04_s_2013_8			
2	1.44	1.51	Supplemental USACE Erosion Survey	Erosion	WS Ma	M	Inspector Comments: 2006 - High vertical bank due to mass failures. Thalweg meandering and erosion of bank. Banks are cohesive with non-cohesive gravel horizons. 2011 - Foundation is silty-sand with gravel. New slumping at the toe, mass failure continues. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: ELC_1-4_L]	40.051596 °	40.051979 °	9	
								-122.164179 °	-122.163106 °		
								DWR ID:			
3	1.60	1.71	Earthen Levee	Slope Stability	WS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible. Inspector Comments: Tehama Co. repaired the slope that was damaged by vehicle traffic, but the damage has returned.	40.052607 °	40.053558 °	3	
								-122.161418 °	-122.159903 °	Y	
								DWR ID: DWR_04_s_2012_3			
4	2.32	2.32	Earthen Levee	Slope Stability	LS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.052415 °	40.052415 °	18	
								-122.149208 °	-122.149208 °	Y	
								DWR ID: DWR_NA0019_04_s_2012_18			
5	2.34	2.34	Earthen Levee	Slope Stability	LS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.052443 °	40.052443 °	12	
								-122.148863 °	-122.148863 °	Y	
								DWR ID: DWR_NA0019_04_f_2013_12			
6	2.46	2.46	Earthen Levee	Slope Stability	LS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.052417 °	40.052417 °	20	
								-122.146747 °	-122.146747 °	Y	
								DWR ID: DWR_NA0019_04_s_2012_20			
7	2.53	2.53	Earthen Levee	Slope Stability	LS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.052872 °	40.052872 °	2	
								-122.145495 °	-122.145495 °	Y	
								DWR ID: DWR_NA0019_04_s_2012_2			
8	2.66	2.66	Earthen Levee	Encroachments	LS Ma	M	DE : Debris	40.054352 °	40.054352 °	4	
								-122.144245 °	-122.144245 °		
								DWR ID: DWR_NA0019_04_s_2012_4			
9	2.82	2.85	Earthen Levee	Slope Stability	LS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.055033 °	40.055595 °	916	
								-122.141457 °	-122.141203 °		
								DWR ID: DWR_NA0019_04_s_2012_916			
10	3.02	3.02	Earthen Levee	Animal Control	LS Ma	M	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	40.056514 °	40.056514 °	5	
								-122.139449 °	-122.139449 °	Y	
								DWR ID: DWR_NA0019_04_s_2012_5			
11	3.03	3.03	Earthen Levee	Encroachments	LS Ma	M	PR : Prunings	40.056487 °	40.056487 °	13	
								-122.139394 °	-122.139394 °	Y	
								DWR ID: DWR_NA0019_04_f_2012_13			
12	3.03	3.03	Earthen Levee	Slope Stability	WS Ma	M	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	40.056388 °	40.056388 °	10	
								-122.139168 °	-122.139168 °		
								DWR ID: DWR_NA0019_04_s_2012_10			
13	3.15	3.15	Earthen Levee	Encroachments	LS Ma	M	ST : Stairway	40.057285 °	40.057285 °	1	
								-122.137732 °	-122.137732 °		
								DWR ID: DWR_NA0019_04_s_2012_1			

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector	
LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment			GPS Latitude/Longitude	Issue No.
	Start	End								Start	End
14	3.34	3.34	Earthen Levee	Encroachments	LS	M	GA : Garbage Ma			40.057558 °	40.057558 ° 6
										-122.134417 °	-122.134417 ° Y
										DWR ID: DWR_NA0019_04_s_2012_6	
15	3.42	3.65	Earthen Levee	Encroachments	LS	M	DT : Ditch En			40.056595 °	40.055527 ° 11
										-122.133547 °	-122.130223 ° Y
										DWR ID: DWR_NA0019_04_s_2013_11	
16	3.72	3.77	Earthen Levee	Vegetation	LS	M	V4 : Elderberries are blocking visibility and flood fight Ma capability.			40.055920 °	40.055945 ° 7
										-122.128948 °	-122.128310 °
										DWR ID: DWR_NA0019_04_s_2012_7	

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Elder Creek	Left	4.07	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	1
Start Levee Mile	1.41
End Levee Mile	1.41
Location	Land Side
Category	Earthen Levee
Item	Animal Control
View of the rodent holes along the landside slope.	
rduffey_f_20130919_027.JPG	



Levee Mile Report Line	3
Start Levee Mile	1.60
End Levee Mile	1.71
Location	Water Side
Category	Earthen Levee
Item	Slope Stability
View of the levee slopes damaged by vehicle traffic.	
rduffey_f_20130919_024.JPG	



Levee Mile Report Line	4
Start Levee Mile	2.32
End Levee Mile	2.32
Location	Land Side
Category	Earthen Levee
Item	Slope Stability
View of the vehicle erosion along the L/S slope.	
rduffey_f_20130919_030.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Elder Creek	Left	4.07	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	5
Start Levee Mile	2.34
End Levee Mile	2.34
Location	Land Side
Category	Earthen Levee
Item	Slope Stability
View of the vehicle erosion along the landside slope.	
rduffey_f_20131104_108.JPG	



Levee Mile Report Line	6
Start Levee Mile	2.46
End Levee Mile	2.46
Location	Land Side
Category	Earthen Levee
Item	Slope Stability
View of the vehicle erosion along the L/S slope.	
rduffey_f_20130919_031.jpg	



Levee Mile Report Line	7
Start Levee Mile	2.53
End Levee Mile	2.53
Location	Land Side
Category	Earthen Levee
Item	Slope Stability
View of the vehicle erosion along the L/S slope.	
rduffey_f_20130919_023.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Elder Creek	Left	4.07	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	10
Start Levee Mile	3.02
End Levee Mile	3.02
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey_f_20130919_025.jpg



Levee Mile Report Line	11
Start Levee Mile	3.03
End Levee Mile	3.03
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the brush pile next to the levee slope.

rduffey_f_20130919_029.JPG



Levee Mile Report Line	13
Start Levee Mile	3.15
End Levee Mile	3.15
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the concrete stairways on the slope.

rduffey_f_20130919_022.jpg



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Elder Creek	Left	4.07	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	14
Start Levee Mile	3.34
End Levee Mile	3.34
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of the garbage and metal at the toe of the levee & along the slope of the landside.	
rduffey_f_20130919_026.jpg	



Levee Mile Report Line	15
Start Levee Mile	3.42
End Levee Mile	3.65
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of the ditch along landside toe.	
rduffey_f_20130919_028.JPG	



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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Tehama County Flood Control and Water Conservation District

Waterway			Bank	Unit Miles
Unit No. 05 Elder Creek			Right	3.96
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	04/10/2013 - 04/10/2013		10/22/2013 - 10/22/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Brandon Konicke Tehama County		Brandon Konicke Tehama County	

Summer & Winter Inspections

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Flood Control Project Maintenance
Levee Inspections

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway								Bank	Unit Miles	Inspection Start/End	Inspector
LMR No.	Levee Mile		Category	Item	* Location	* Rating	Action/Comment	GPS Latitude/Longitude		Issue No.	
	Start	End						Start	End		
1	0.42	0.42	Earthen Levee	Animal Control	LS Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.		40.050668 °	40.050668 °	1	
								-122.184588 °	-122.184588 °	Y	
								DWR ID: DWR_NA0019_05_f_2013_1			
2	0.81	0.81	Earthen Levee	Encroachments	LS M En	PR : Prunings		40.050654 °	40.050654 °	13	
								-122.177666 °	-122.177666 °	Y	
								DWR ID: DWR_NA0019_05_f_2013_13			
3	0.94	0.94	Earthen Levee	Animal Control	LS M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.		40.051237 °	40.051237 °	4	
								-122.175410 °	-122.175410 °	Y	
								DWR ID: DWR_NA0019_05_s_2013_4			
4	2.55	2.55	Earthen Levee	Animal Control	WS M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.		40.051705 °	40.051705 °	5	
								-122.148531 °	-122.148531 °	Y	
								DWR ID: DWR_NA0019_05_s_2012_5			
5	2.57	2.57	Earthen Levee	Animal Control	LS M Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.		40.051675 °	40.051675 °	8	
								-122.148122 °	-122.148122 °	Y	
								DWR ID: DWR_NA0019_05_s_2012_8			
6	2.70	2.76	Earthen Levee	Vegetation	LS M En	V6 : Landscaping		40.051778 °	40.052243 °	2	
								-122.145745 °	-122.144825 °	Y	
								DWR ID: DWR_NA0019_05_s_2012_2			
7	3.08	3.10	Supplemental USACE Erosion Survey	WS M Ma	Inspector Comments: 2006 - Mass failure of this bank due to being along the outside of a bend where erosion and undercutting are the greatest. Low flow is being forced into the toe of this bank by point bar on the opposite side of the creek. 2011 - Toe of the bank continues to be undercut. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: ELC_3-0_R]			40.054730 °	40.054970 °	3	
								-122.140578 °	-122.140238 °		
								DWR ID:			
8	3.13	3.13	Earthen Levee	Vegetation	WS M Ma	V4 : Elderberries are blocking visibility and flood fight capability.		40.055632 °	40.055607 °	11	
								-122.138910 °	-122.138868 °		
								DWR ID: DWR_NA0019_05_s_2012_11			
9	3.37	3.84	Earthen Levee	Vegetation	WS M Ma	V4 : Elderberries are blocking visibility and flood fight capability.		40.056831 °	40.054862 °	9	
								-122.136365 °	-122.129279 °		
								DWR ID: DWR_NA0019_05_s_2012_9			
10	3.45	3.45	Earthen Levee	Erosion / Bank Caving	LS M Ma	E2 : Schedule repair of erosion site prior to the next inspection.		40.056727 °	40.056727 °	7	
								-122.134888 °	-122.134888 °	Y	
								DWR ID: DWR_NA0019_05_s_2012_7			
11	3.77	3.91	Earthen Levee	Vegetation	WS M Ma	V4 : Elderberries are blocking visibility and flood fight capability.		40.056922 °	40.054562 °	10	
								-122.136365 °	-122.128345 °		
								DWR ID: DWR_NA0019_05_s_2012_10			

* Location LS : Land Side WS : Water Side CR : Crown

** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable

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+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Elder Creek	Right	3.96	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	1
Start Levee Mile	0.42
End Levee Mile	0.42
Location	Land Side
Category	Earthen Levee
Item	Animal Control
View of the rodent holes along the landside slope.	
rduffey_f_20131104_109.JPG	



Levee Mile Report Line	2
Start Levee Mile	0.81
End Levee Mile	0.81
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of the prunings along the landside slope.	
rduffey_f_20131104_110.JPG	



Levee Mile Report Line	3
Start Levee Mile	0.94
End Levee Mile	0.94
Location	Land Side
Category	Earthen Levee
Item	Animal Control
View of the rodent holes along the levee slope.	
rduffey_f_20130919_033.JPG	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Elder Creek	Right	3.96	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	4
Start Levee Mile	2.55
End Levee Mile	2.55
Location	Water Side
Category	Earthen Levee
Item	Animal Control
View of the rodent activity along the landside slope.	
rduffey_f_20130919_034.JPG	



Levee Mile Report Line	5
Start Levee Mile	2.57
End Levee Mile	2.57
Location	Land Side
Category	Earthen Levee
Item	Animal Control
View of the bait station next to the squirrel holes on the landside slope.	
rduffey_f_20130919_036.jpg	



Levee Mile Report Line	6
Start Levee Mile	2.70
End Levee Mile	2.76
Location	Land Side
Category	Earthen Levee
Item	Vegetation
View of the landscape along the slope.	
rduffey_f_20130919_032.jpg	



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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Tehama County Flood Control and Water Conservation District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Elder Creek	Right	3.96	10/22/2013 10/22/2013	Bob Duffey

Levee Mile Report Line	10
Start Levee Mile	3.45
End Levee Mile	3.45
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving
View of the erosion along the L/S slope.	
rduffey_f_20130919_035.jpg	



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